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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,702	09/19/2003	Ramanujan K. Valmiki	17440US02	1993

23446 7590 10/04/2006

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EXAMINER

SAJOUS, WESNER

ART UNIT

PAPER NUMBER

2628

DATE MAILED: 10/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/666,702	VALMIKI ET AL.	
	Examiner	Art Unit	
	Sajous Wesner	2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,2,9 and 10 is/are rejected.
- 7) ☒ Claim(s) 3-8 and 11-16 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>6-14-01, 6-24-04, 8-9-04, 12-14-04,</u> | 6) <input type="checkbox"/> Other: ____ |

→ 1-25-05, 7-18-05, 8-26-05, 1-23-06

DETAILED ACTION

This is a first office action. Claims 1-16 are presented for examination.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-2, 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bolyn (US 6233665) in view of Mills (US 5923385).

Considering claim 1, Bolyn discloses a method of accessing a memory (136, fig. 1) having one or more banks (124-126, fig. 1), each bank having one or more rows, for processing data (see col. 6, lines 10-26), the method comprises requesting (112, fig. 1) a memory controller (114, fig. 1) to transfer the data used for processing; and determining in the memory controller (114 fig. 2) which of said rows for which of said banks are to be prepared with a row address select (RAS) operation, so as to efficiently transfer the data (col. 6, lines 56-64).

What is lacking by Bolyn is a method of accessing a memory for processing and transferring of MPEG video data.

Mills discloses accessing a memory (56, fig. 1) for processing and transferring of MPEG video data. See col. 10, lines 24-38.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the data memory system of Bolyn to include the processing and transferring of MPEG video data via a memory in the same conventional manner as taught by Mills, in order to reduce memory size and improve bandwidth requirement.

Re claim 2, Bolyn discloses a minimum number of wasted clocks (via bank access control block 368, fig. 3) can be realized through the determining step in the memory controller (311 of fig. 3A).

System claim 9 contains features that are analogous to and performs the same function as method claim 1. As the limitations of claim 1 have been found obvious over the combined teaching of Bolyn and Mills, it is readily apparent the applied prior art perform the underlying elements. As such, the limitations of claim 9 are therefore rejected under the same rationale as claim 1.

Claim 10 is rejected under the same rationale as claim 2.

Allowable Subject Matter

3. Claims 3-8, and 11-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, because the prior art of record fails to teach a maximum burst efficiency can be achieved through determining which of the rows for which of the banks are to be prepared with the RAS operation in the memory controller (as recited in claims 3 & 11); the memory controller tailors a

Art Unit: 2628

sequence of transferring the MPEG video data to improve transfer efficiency (as recited in claims 4 and 12).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

I. Rao (US 6256256) discloses a dual port random access memory that includes an array of rows and columns of memory cells.

II. Kengeri (US 6442098) discloses a high performance multi-bank compact synchronous DRAM architecture having distributed memory bank segments logically coupled to form a virtual memory bank.

III. Bart et al. (US 200210042182) discloses an asynchronous request/synchronous data dynamic random access memory for transferring information within a computer system.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sajous Wesner whose telephone number is 571-272-7791. The examiner can normally be reached on Mondays thru Fridays between 10:30 and 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung can be reached on 571-272-7794. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2628

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Wesner Sajous



9/26/06